

## INSTALLATION INSTRUCTIONS

### CB2Z TWO ZONE CONNECTING BLOCK

The Model **CB2Z** is a device that provides routing of infrared remote control signals. Independent control of two audio/video systems can be obtained from two zones. One emitter port is provided for each zone, plus one common port so that certain components can be controlled from both zones. The **CB2Z** is a simplified unit, intended for use when only two zones are needed.

#### SPECIFICATIONS

- Inputs: 2 - Four screw removable connectors to interface with all 3-wire IR receivers (see Caution Note, Fig. 2, below)
- Outputs: Two zone emitter ports and 1 common emitter port (3.5mm miniature phone jacks).
- Can be used with a **CB1** Connecting Block or an **ACB1** Amplified Connecting Block for COMMON emitter expansion. (See Fig. 4 & 5)
- Uses Sonance **E1, VE1, E2** and **VE2** Mini Emitters.
- Power requirements: 12 volts DC. Uses **PS1** or **PS2** Power Supplies.
- 2.1 mm coaxial power jack.
- Dimensions: 2-3/8"W x 3"D x 13/16" H.

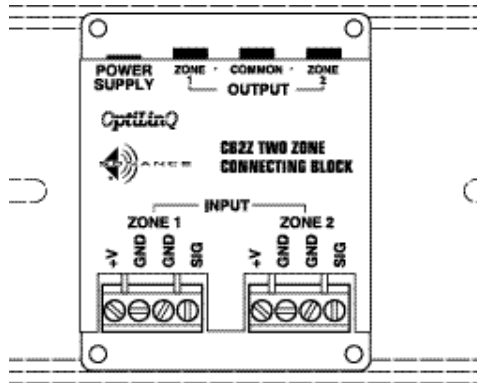


Fig. 1: **CB2Z** Two Zone Connecting Block  
Mounted in 3" SNAPTRACK®  
(SNAPTRACK is a registered trademark of AUGAT)

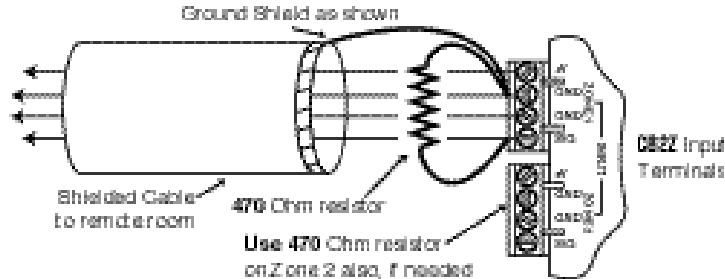


Fig. 2: 470 Ohm Capacitance  
Discharge Resistor

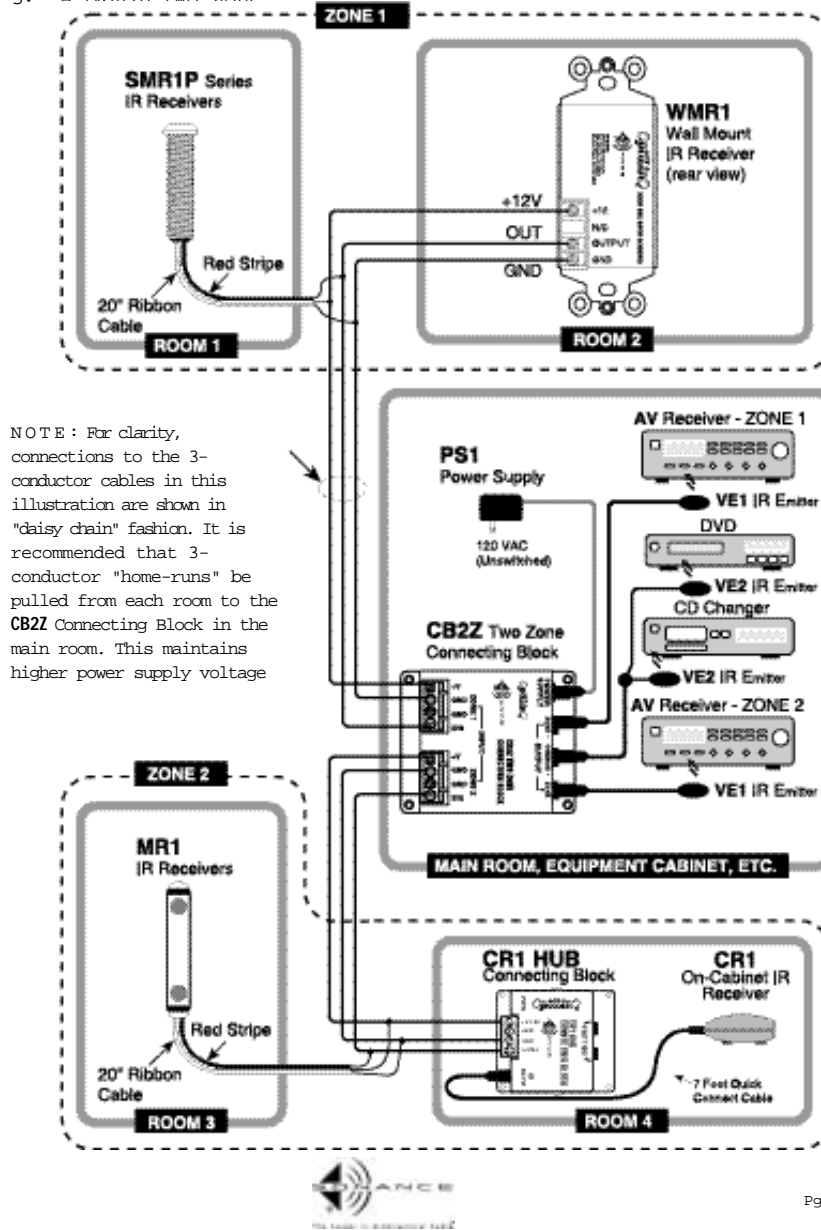
**CAUTION:** For Shielded Wire and Long Lead Lengths  
When using lengths greater than 200 feet of inter-room shielded cable, it may be necessary to connect a 470 Ohm 1/8 Watt resistor between INPUT (SIG) and GROUND (GND) at the IR input terminals of the **CB2Z**. Refer to Fig. 2, above. The resistor discharges the cable capacitance more quickly, allowing IR codes of high bit

INSTALLATION

Fig. 3, see below, shows a typical two-zone installation with a total of four remote rooms. A variety of Sonance IR Receivers are shown, two in each zone. When configuring a system, please keep the following items in mind:

1. More IR Receivers may be wired in parallel, in the same manner as shown, up to a maximum of 12. More than 12 is not recommended because IR noise picked up by the many IR receivers may cause erratic operation and reduce remote control range.
2. Be sure to connect the +1.2 VDC power, SIGNAL output, and GND ground of each IR Receiver or Keypad to the respective +1.2VDC, SIGNAL and GND of the connecting block as shown.

Fig. 3: A Typical Two-Zone



**Power Supply Requirement:**

1. Most IR receivers draw 2 milliamps (mA) without signal and 10 mA with signal (check specs. on actual model).
2. The maximum current for proper operation from the **PS1** Power Supply is 200 ma.
3. The maximum current for proper operation from the **PS2** Power Supply is 1000 ma.
4. When using combinations of receivers, do not exceed the maximum current ratings of the power supplies as noted above.

For example, 6 IR receivers and 4 emitters could be used with one **PS1** Power Supply. If the current of the **PS1** will be exceeded, use the **PS2** power supply instead.

**NOTE:** To avoid current "hogging", never connect regulated supplies, such as the **PS1** and **PS2**, in parallel!

**CAUTION:** Do not use unregulated 12V power supply adapters from other manufacturers. These may deliver excessive voltage to the IR receivers and cause them to "latch-up". When this occurs, the "talkback" LEDs and **VE1** emitters (if used) will stay on continuously!

**EMITTER EXPANSION**

Fig. 4, below, shows the single common emitter port on the **CB2Z** connected to a **CB1** Connecting Block (or an **ACB1** Amplified Connecting Block). Also, if you need to drive more than 4 signal emitters from the common port, they must be driven by an **ACB1** Amplified Connecting Block.

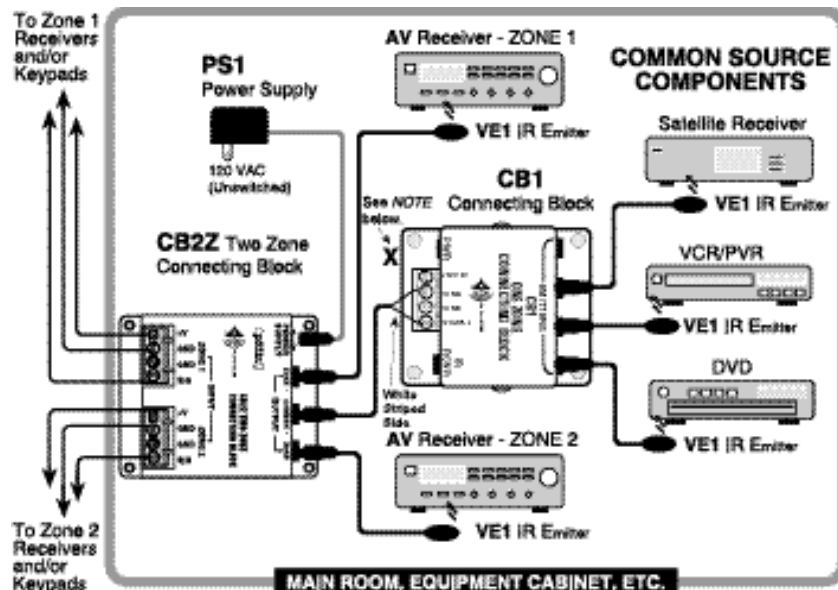


Fig. 4: Using **CB1** for Emitter Expansion

**NOTE:** No power supply is connected to the **CB1**! It is not needed when the **CB1** is used strictly as an expansion block, as it is in this example. Also, if you need to drive more than four single emitters from the **COMMON** port, they must be driven by an **ACB1** Amplified Connecting Block. See Fig. 5, next page.



**CAUTION:** Because the ZONE and COMMON jacks on the CB2Z are connected in series, you must have an emitter(s), a connecting block (with emitters), or other Sonance IR controlled device plugged into the COMMON jack for the zone emitters to operate! This is true for the ZONE OUTPUT jack as well.

Fig. 5, below, illustrates an ACB1 driving six emitters for control of six common components. Up to 10 single or 10 dual emitters may be driven directly from the ACB1.

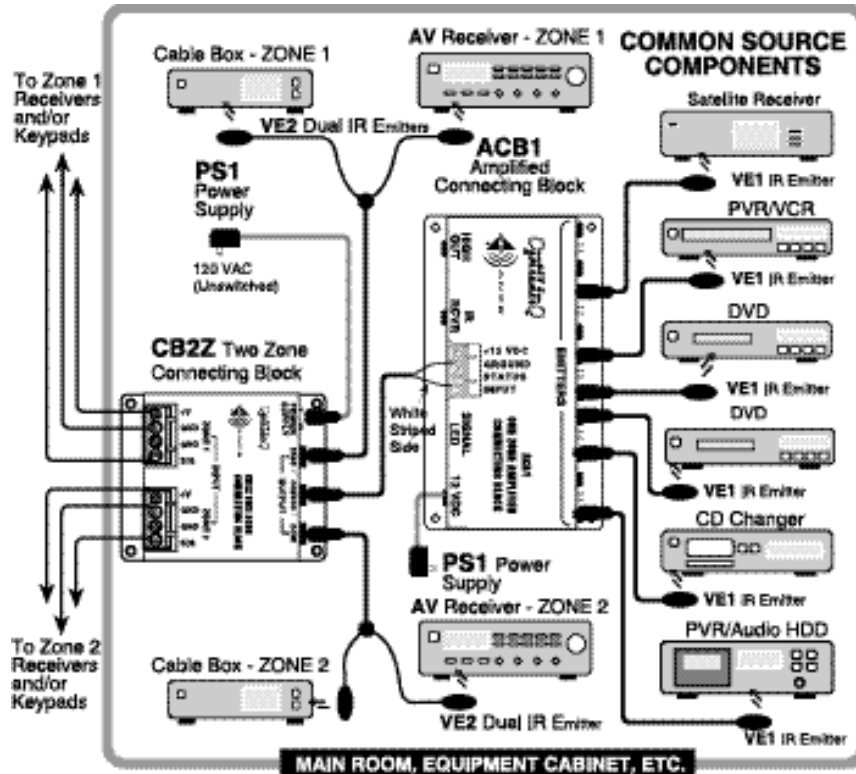


Fig. 5: Using a ACB1 for Emitter Expansion

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**MOUNTING**

The CB2Z can be conveniently mounted to a wall or shelf by using screws or mounted into 3" SNAPTRACK®.

